



Launch Mission Execution Forecast

Vehicle: Falcon 9 ZUMA

Issued: 2 Jan 2018/1230 EST(1730 UTC)

Valid: 5 Jan 2018/2000 – 2200 EST (6/0100-0300 UTC)

Synoptic Discussion: Gusty northerly winds and coastal rain bands will temporarily decrease through this evening; however a low pressure area is developing near the Bahamas. On Wednesday, the low pressure is forecast to deepen, reinvigorating the winds and coastal showers before being pushed north in the afternoon by a strong upper-level trough. This will allow skies to clear and temperatures to plummet as winds turn northwesterly. Thursday will be chilly with a low of 40°F with 10-15 mph winds at the launch pad. Friday will be an even colder morning with lows in the upper 30s at the pad and possible below freezing temperatures inland. Scattered upper-level clouds are forecast to move through the area during the day. The primary weather concern is clouds building below 20,000 feet and remaining into the launch window. Maximum upper-level winds will be from the west at 100 knots near 40,000 feet.

On Saturday, winds begin to turn more northeasterly bringing in low-level moisture and moderating the temperatures. The primary weather concern remains thick cloud layers lingering over the Spaceport. Maximum upper-level winds will be from the northwest at 75 knots near 40,000 feet.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Cirrostratus	Scattered	28,000	33,000

Weather:	None	Solar Activity:	Low
Surface Visibility:	7 Miles	Pressure:	30.32 inHg
Liftoff Winds (MPH):	320° @ 15 P20 (160')	RH:	64%
Temperature:	46°F		

Launch day probability of violating launch weather constraints: **10%**
Primary concern(s): Thick Cloud Layers Rule

Delay day probability of violating launch weather constraints: **20%**
Primary concern(s): Thick Cloud Layers Rule

Sunrise: 5/0716 EST
6/0716 EST

Sunset: 5/1740 EST
6/1741 EST

Moonrise: 5/2153 EST
6/2254 EST

Moonset: 6/1055 EST
7/1134 EST

Illumination: 73%
63%

Next forecast will be issued: 3 January 2018